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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,441	12/20/2005	Yoshitaka Okada	Q92076	6365
23373 7590 01/15/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER MAYO III, WILLIAM H	
			ART UNIT 2831	PAPER NUMBER
			MAIL DATE 01/15/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,441

Applicant(s)

OKADA ET AL.

Examiner

William H. Mayo III

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date December 20, 2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been filed in PCT Application No. PCT/JP2005/003624, filed on March 3/3/2005.
2. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. 120. The 371 Application Number PCT/JP2005/003624, filed on March 3/3/2005.

Information Disclosure Statement

3. The information disclosure statement filed December 20, 2005 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Drawings

4. Figures 13a-13b should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because throughout the abstract, it refers to purported merits or speculative applications of the invention, which is improper content for the abstract. The applicant should delete any references to purported merits or speculative applications of the invention to provide the abstract with proper content. Correction is required. See MPEP § 608.01(b).

8. The abstract of the disclosure is also objected to because it contains multiple paragraphs, has more than 50-150 words, and is not in narrative form (i.e. provides full descriptions of invention), which is improper language for the abstract. The applicant should rewrite the abstract utilizing a single paragraph having 50-150 words to provide the abstract with proper language. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura (JP Pat Num 2000-261932). Kawamura discloses a corrugated tube (10) including a tube body of tubular shape having a larger diameter portion (11) and smaller

diameter portions (12) which are arranged alternatively along the same axis (Fig 1), and a slit (20, as shown in Fig 6) formed along a generating line of the line body (Fig 6), wherein a communication hole (15a) communicates an inside and outside of the tube body with each other, wherein the hole (15a) is formed in a peripheral surface of the tube body by cutting part of the larger diameter portion (11) off over a predetermined length in a circumferential direction (Fig 1). With respect to claim 2, Kawamura discloses that the communication hole (15a) is formed at least in a portion of the peripheral surface of the tube body which is remotest from the slit (20, Fig 6). With respect to claim 3, Kawamura discloses that the plurality of communication holes (15a) are provided and arranged in a staggered manner in the peripheral surface of the tube body when the peripheral surface is shown in a developed view (Fig 1). With respect to claim 4, Kawamura discloses that the communication hole (15a) is formed to include a part of vertical wall portion interconnecting the larger diameter portion and the smaller diameter portion (Fig 5). With respect to claim 5, Kawamura discloses that the communication hole (15a) is formed to include a part of each of the vertical wall portions each formed between the larger diameter portion (11) and the respective one of the smaller diameter portions (10) disposed respectively on opposite sides of the larger diameter portions (11) in a circumferential direction (Fig 5).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroschak (Pat Num 3,877,831). Maroschak discloses an apparatus (Figs 1-14) comprising an improved method for forming corrugated tube (Figs 1-11). Specifically, with respect to claim 6, Maroschak discloses an apparatus (Figs 1-14) capable of forming a corrugated tube (T) including a tube body of tubular shape having a larger diameter portions (35) and smaller diameter portions (36) which are arranged

alternatively along the same axis and a slit (S) formed along a generating line of the body, wherein a slit former (60) forms a slit (S) in the tube body as the tube body of corrugated tube (T) is moved along the generating line of the tube body (Fig 1), a tube guide (40) which is provided upstream side of the slit former (60) in a opposite moving direction of the tube body of the corrugated tube (T) and is fitted into the tube body moving in a direction along the generating line (Fig 1), at least one pair of tube body feeders (54) which are provided at opposite sides of the tube guide (40) in a moving direction of the tube body and abut against the tube body supported on the tube guide (40) from opposite side of the tube body in an opposite moving direction and rotate thereby moving the tube body along the tube guide (40, Fig 1), and a perforator (51 & 53) forming a plurality of communication holes (38a-38c) in predetermined portions of the peripheral surface of the tube body which is moved along the tube guide (40) by the tube body feeders (54). With respect to claim 7, Marschak discloses that the pair of tube body feeders (54) are provided at each of an upstream side of the perforator (51 & 53) in the moving direction of the tube body Wherein the two pairs of tube body feeders (54) are provided in all (Fig 1). With respect to claim 8, Marschak discloses that the retainers (42 & 43) are provided at the vicinity of the perforator (51 & 53) respectively and the retainers are brought into abutting engagement with the peripheral surface of the tube body to retain the tube body before perforating operation of the perforator (51 & 53). With respect to claim 9, Marschak discloses that the perforator (51 & 53) and the retainers (42 & 43) are driven by a cam mechanism (41). With respect to claim 10, Marschak discloses that the perforators (51 & 53) are proved in opposed relation to

three portion of the peripheral surface of the tube body of the corrugated tube spaced almost 90 degrees from one another in a circumferential direction and the three portions do not include a portion at which the slit (20) is formed and the perforators (51 & 53) are arranged in offset relation in the moving direction of the tube body (Col 5, lines 36-42). Specifically, with respect to claim 11, Maroschak discloses an apparatus (Figs 1-14) capable of forming a corrugated tube (T) including a tube body of tubular shape having a larger diameter portions (35) and smaller diameter portions (36) which are arranged alternatively along the same axis and a slit (S) formed along a generating line of the body, wherein the method comprises forming a slit (S) by the slit former (60) as the tube body as the tube body of corrugated tube (T) is moved along the generating line of the tube body (Fig 1), fitting a tube guide (40) into the tube body to support the tube body in such a manner that the tube body is moving in a direction along the generating line (Fig 1), moving the tube body along the tube guide by at least one pair of tube body feeders (54) which are provided at opposite sides of the tube guide (40) in a moving direction of the tube body and abut against the tube body supported on the tube guide (40) from opposite side of the tube body in an opposite moving direction and rotate thereby moving the tube body along the tube guide (40, Fig 1), and forming a plurality of communication holes (38a-38c) by a perforator (51 & 53) which is movable in a direction perpendicular to the moving direction of the tube body (Fig 2). With respect to claim 12, Marschak discloses that the pair of tube body feeders (54) are provided at each of an upstream side of the perforator (51 & 53) in the moving direction of the tube body wherein the two pairs of tube body feeders (54) are provided in all (Fig 1).

However, Marschak doesn't necessarily disclose the tube guide being provided downstream side of the slit wherein the tube guide supports the slit (claims 6 & 11), nor the tube body feeders being located at a downstream side of the perforator (claims 7 & 12).

With respect to claims 6-7 and 11-12, it would have been obvious to one having ordinary skill in the art of forming corrugated tubes, at the time the invention was made to modify assembly line of Marschak to the slit former to be upstream the tube guide and body feeders such that the tube guide is provided downstream side of the slit wherein the tube guide supports the slit and the tube body feeders are located at a downstream side of the perforator, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Kawamura (Pat Num 6,078,009), Kawamura (Pat Num 6,034,329), Monds et al (Pat Num 3,694,563), Tadokoro (Pub Num 2002/0185190 A), Tadokoro (Pat Num 6,843,276), Hegler (Pat Num 4,513,787), and Domingues Duarte et al (Pat Num 6,938,645), all of which disclose various corrugated tubes.

Communication

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-

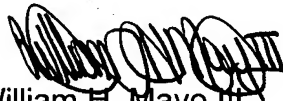
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272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245 or (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
January 7, 2008